

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: "new ham"-to-be in NY needs gear
Message-ID: <Pine.SUN.3.95.961214165720.17629D-100000@coyote.rain.org>

Saw msg on <rec.radio.amateur.equipment>. Man has 13-year-old son interested in amateur radio, willing to learn CW, wants to do HF. He'd like to get the kid a rig for Christmas, but current prices too high. I recommended used tube gear for simplicity, opportunity to really learn what each circuit does, ability to learn more by modifying (hard to do with solid state), etc.

If interested, contact John Figliozzi <johnfig@earthlink.net>, in Clifton Park, NY. He's already found an "Elmer" for the kid, but more advice (and support for the BA approach) would help.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: "Garey Barrell, K40AH" <75025.73@CompuServe.COM>
Subject: 32V Dial Bulbs - Addendum
Message-ID: <961214162117_75025.73_FHD25-1@CompuServe.COM>

My post on 381 bulbs yesterday referenced prices from a Newark catalog. I tend to grab Newark because it is so complete and I am familiar with it.

HOWEVER

The 328 and 381 bulbs are listed in Mouser on page 62 of their current catalog 588. Not only that, but they are both the same price AND cheaper than Newark.

The 381 is Mouser Stock Number 353-0381 and is priced at \$0.61 each or \$0.54 each in quantity of 10.

Mouser Electronics
800-346-6873
www.mouser.com
sales@mouser.com

73, Garey - K40AH
75025.73@compuserve.com
Atlanta

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: carl yaffey <cyaffey@sprynet.com>
Subject: re: 32V pilot lights
Message-ID: <2.2.32.19961214162557.0073e190@m1.sprynet.com>

TNX to all who responded to my plea for a source of 32V pilot lights. It turns out that GE makes a #381 that has a 20,000 hour life and will work fine in the rig. The only drawback is somewhat less light output. I found some at a local lighting supply house.
Happy Holiday es 73, Carl

Carl Yaffey K8NU (ex-W4EZB) cyaffey@sprynet.com 614 268 6353 Columbus OH
Banjo player for One Riot One Ranger, independent software developer.

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From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: "Bill Richarz" <wricharz@transprt.com>
Subject: 4CX-250 Tubes
Message-ID: <19961214112348.08695cc1.in@transprt.com>

Not sure if these qualify as BA tubes, nonetheless, I have a pair in the Boxes, but think they are pulls. They were in with a large number of other tubes. How can I tell if the tubes are good? I can't find a tube base diagram, so not sure which pins are the filaments. I would like to sell them as pulls if they check okay.

Sure have learned alot here. Thanks for the help.

73 de Bill WA4VAF

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: John Kolb <jlkolb@cts.com>
Subject: 7360 replacements
Message-ID: <Pine.SCO.3.91.961214172027.20094A-100000@sd.cts.com>

Discussions on the boatanchors mail list last Aug indicated that the 6JH8 and the 6AR8 might be substitutes for the 7360. Jack Hill, the listowner, reported that he had substituted the

6JH8 for the 7360 in a HT-32 and it worked even better.

I have a 51J-3, which I added a 7360 product detector to many, many years ago, replacing the 12AX7 used for AM detection and IF output isolation. I don't have the schematic of the change any more, and it's too crowded to trace out, but it doesn't match any of the 7360 articles I currently have. I recently made a plug in adapter to plug the 6JH8 tube into the 7360 socket, since the tubes have a different pin-out. In my circuit the 6JH8 works as well as the 7360, without changing any component values. Pin 5 of the filament pair must be grounded, since that pin also contains the internal connection to Grid 2 and an internal shield. If you ground pin 4 instead, a loud 60 Hz hum will result.

There are a large number of other possible replacements. In the Aug 59 CQ magazine, an article by my old boss, Lester Earnshaw, "A New Product Detector" details his experiences with the 6AR8 and 6BU8 as mixers, product detectors and balanced modulators.

The 6AR8 was a beam deflection tube like the 7360 and 6JH8, but the 6BU8 is called a twin pentode, and has a common cathode, G1 and G2, but separate G3 and plates.

Looking through the RCA and Sylvania tube manuals, I found a number of other possible replacements for the \$15 7360. These seem to have all been widely used in TV's as color demodulators. Check those stocks of old TV tubes.

TYPE	DESCRIPTION	BASE	OTHERS
6GS8	twin pentode	9FG	3GS8, 3BU8, 4GS8
6LE8	twin pentode	9QZ	8LE8, 10LE8, 15LE8
6ME8	beam deflection	9RU	
6MK8	twin pentode	9FG	4MK8
7360	beam deflection	9KS	
6BU8	twin pentode	9FG	3BU8, 3GS8, 4BU8, 4GS8
6AR8	beam deflection	9DP	

John KK6IL

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: k0az@i1.net (MIKE SANDERS)
Subject: 75A4 AM filter ala Digi Key//Vector 9kc AM filter FS
Message-ID: <199612150021.SAA12145@mail1.i1.net>

Greetings All,

I am so far behind in the garage that its pitiful. However today after

working some of that Saturday overtime I got to the bench.

WB9GKZs article in ER of August 93 spoke of the excellent service from DigiKey so I should have not been surprised when it was like lightning. But I was still surprised. Amazed actually. Anyway I bought a couple of the filters to make one up for myself and a friend. I just finished his this evening and pulled the Vector 9kcs out of my A4 to try it out. I called him on the phone to let him hear the difference in signals on AM with the 3.1 kcs standard Collins filter and the \$2.65 Digi Key filter. Very impressed. It has been said before but I wanted to say it too. They work very well. One one hundreth of the cost of a Collins mechanical filter for you non purist types should be of interest. I am going to pull his out my receiver and get it packed to ship. Tonight I will make mine up. I found some 9 pin plugs at a local surplus store a couple weeks ago. They have loops on top for soldering to and make these filters a snap to use.

BTW I now have For Sale an almost new 9kcs Vector Control filter for anyone who can't stand to put a 2 dollar and 65 cent filter in their A4. 100 bux shipped and I'm losing money on this deal. Any takers? Hmmm?

73, Mike K0AZ

P.S. Being a copy cat may not be the most fun but on this one it was the smart thing to do. Lot of thanks to Pat for putting us all onto this little filter caper. Also remembered pulling out the 3 legged filters in CBs when we converted them to FM. Just pitched them. So if you have an old dead SS CB about you might check to see if it has one of the three legged style ceramic filters in it at 455. Its probably 6khz. Try it out.

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996

From: John Kolb <jlkolb@cts.com>

Subject: Re: 75A4 AM filter ala Digi Key//Vector 9kc AM filter FS

Message-ID: <Pine.SCO.3.91.961214171256.19224C-1000000@sd.cts.com>

On Sat, 14 Dec 1996, MIKE SANDERS wrote:

> evening and pulled the Vector 9kcs out of my A4 to try it out. I called him
> on the phone to let him hear the difference in signals on AM with the 3.1
> kcs standard Collins filter and the \$2.65 Digi Key filter. Very impressed.
> It has been said before but I wanted to say it too. They work very well.

Kiwa Electronics (509)453-5492 has the LF-H4S ceramic filter for about \$15 according to an article in issue 35 of Hollow State News. This filter has quite impressive curves, 6.7 kHz wide at -6 db and only 10.5 at -60.

John KK6IL

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: lkayser@rideau.net (Larry Kayser)
Subject: Re: 829B/4D32 switchability?
Message-ID: <199612142135.QAA05521@mail.peterboro.net>

>829 and 832's are plentiful in NEW condition at my residence and
>when I talk to people about them Larry, they tell me they have
>boxes full of them laying around.
>
>The Viking I used the 829 in the early model and then went to the
>4D32 in the later versions. Collins used the 4D32 in the 32V
>series transmitters. But then you probably already knew this bit
>of nonsense.

Well, Nonsense?! It can and just might get worse!!!!

I have worked w1bcg a few times on 1813 in the last few days, it got me to thinking.....

I was just toying with two 100 Watt GE Master Progress Line FM Radio's and my mind slipped into high gear. Part out the two radio with their nice 5894 finals and build a TPTG transmitter for 160 out of those two devices. Not saying its going to happen, but then just maybe it might. I have the power supply in hand.

Oh the joys of having been born and raised during the era when the glow of tubes brought the rush of the slide rule and the joy of hearing and working W1BCG. Yup CW is outdated, not needed, a waste of time. Long live Tubes. Long live CW.

Hey, if you get me going on a Saturday afternoon we might even work Hitler's comment about wringing the English neck in WW II. Winston Churchill replied "Some Chicken", "Some Neck" , Tubes and CW will outlast this sanderized stuff.....

Larry
va3lk / wa3zia

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: Rudy Salomon <rhs@pacbell.net>
Subject: Re: Airbone SSB
Message-ID: <32B22CEA.1007@pacbell.net>

Ronnie Hull wrote:

>
> howdy fellow anchormen
>
> while not exactly on the boatanchor topic, I have a question that some of
> you are bound to be able to answer. I recently found some notes I had jotted
> down in the mid 60's. While shortwave listening in the 11 mhz band, I ran
> across some airborne SSB transmissions. They were obviously military. There
> were 3 or 4 different transmissions from different locations, all with
> 3-alpha messages directed to someone called "sky king" .
>
> typically, these would start at 17 minutes after the hour. A typical
> transmission would be "sky king, sky king, this is democrat, this is
> democrat, do not answer, break break. The following is a 3-A message in two
> part. etc etc.
>
> Democrat was one of the 4, I can't remember the others names, all calling
> sky king. The different locations would follow each other, 4 or 5 minutes
> apart, all calling Sky king.
> Was this a SAC airborne command post? Or, was Sky King the command post? Who
> was this, what was the purpose? What sort of aircraft did these signals
> originate from? What kind of equipment was used? I remember seeing
> something about it in Popular Electronics many many years ago, but I can't
> remember all about it.
>
> Since a lot of your fellows are obviously ex-military (I was army and if it
> didn't have anything to do with slugging it out in the mud, I have no
> idea!!) maybe some of you can enlighten me.
>
> Ronnie - W5SUM
>
> thanks in advance.

>From an article in the March 1986 issue of Popular Communications;

"From SAC HQ itself, here is an explanation of the Giant Talk network;
" Giant Talk is a high frequency single sideband radio system that
provides a means for positive control of the SAC airborne force. Its
prime function is transmission of emergency action messages to SAC
aircraft launched under positive control. Giant Talk also provides
positive control communications for day to day control of aircraft
reconnaissance operations. The system consists of 12 stations worldwide
and is accessible from the SAC and numbered Air Force command posts,"
....The word "Skyking" serves as a message routing indicator, and in
this case, Skyking means "to all U.S. nuclear forces and support units.
It being a force wide broadcast, the "do not answer" reference is
self-explanatory."

There is an interesting site on the internet that is involved with monitoring those types of comms. <http://www.leonardo.net/berri/wun>

There is a note in a 1993 dated piece of lit. that I have "The old SAC Giant Talk system remains".

It would, indeed, be interesting to get the details from the actual people directly involved with this system....Anyone?

Regards, Rudy Salomon KD6NRQ

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: Airbone SSB
Message-ID: <32B256D6.4929@n-link.com>

Ronnie Hull wrote:

>
> howdy fellow anchormen
>
> across some airborne SSB transmissions. The were obviousley military. There
> were 3 or 4 different transmissions from different locations, all with
> 3-alpha messages directed to someone called "sky king" . thanks in advance.

Long story, but will condense as much as possible. This was part of SAC's original bomber force control system, part of the "fail-safe" concept that insured that only the President could direct the dropping of nuclear bombs/launch of nuclear missiles. SAC HQ (Omaha, NE) had one such HF station and I can't remember its call sign. Others were 8th AF (Massachussetts), which was "Outweigh"; 2nd AF (Louisiana), which was "Retail" and 15th AF (California), which was "Democrat".

Generally these were practice messages directed to any SAC aircraft that were in the air (Skyking), and crews were required to copy, authenticate and (sometimes) decode the messages and keep a log of them. The main purpose of the constant practice was to get a good grasp of contact range, propagation, procedure, and system reliability worldwide. However, in the event of hostilities, the system would have been used to control the launch and execution of the nation's nuclear force.

For those who remember the old movie "Fail Safe", SAC's concept was just the reverse of that of the movie, in

which the failure of a piece of comm/decoding gear aboard an aircraft enroute to the target resulted in the inadvertent unleashing of a nuclear strike. The real system was established so that an airplane would have had to receive, authenticate and properly decode an order before it could proceed past a certain point; otherwise it was to return. Any failure of radios, coding equipment, or improper procedure would guarantee that the airplane could NOT deliver its weapons. SAC's term for this was "Positive Control".

I was a flight crew member, but perhaps there are a few ROs who worked the ground stations who can fill us in on the rest of the story.

--

Dube Todd

K4DWW

dube3@n-link.com

Tell yourself NO now and then; it's good for you.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996

From: John Kolb <jlkolb@cts.com>

Subject: Re: Airbone SSB

Message-ID: <Pine.SCO.3.91.961213221121.13293A-100000@sd.cts.com>

On Fri, 13 Dec 1996, Ronnie Hull wrote:

> typically, these would start at 17 minutes after the hour. A typical
> transmission would be "sky king, sky king, this is democrat, this is
> democrat, do not answer, break break. The following is a 3-A message in two
> part. etc etc.
>

I was Navy, so can't answer from experience either. My understanding is that these were transmissions to the SAC bombers flying patterns far out over the Pacific, which when decoded would tell them whether to keep flying in circles or to head towards Russia with their cargo. The story goes that during one of the exercises back in the late 70's, that someone messed up one of the test msgs and left off the "this is a drill" part, so the people making up the coded msgs thought we were really being attacked. I heard that all of a sudden that the voices were no longer the calm, cool, bored sound "Sky King, Sky King, this is .." but rather frantic sounding.

CQ magazine once did a conversion article on the Collins radio from the B-52's, which was in a cannister shape, and run completely by remote control, but never saw any of the radios offered for sale

after that. If the radios were only for the B-52's guess there weren't ever enough to make much of a splash in the surplus market.

John

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: william wiggins <bwiggg@worldnet.att.net>
Subject: re: Airborne HF SSB
Message-ID: <19961215000615.AAA256@LOCALNAME>

The radio used in B-52's until about the 1980's was the Collins 1 kw AN/ARC-58. It used the R-761 Rx'er/.3 watt exciter unit to drive the T-605 linear amp for 1kw output to the CU-523 automatic ant tuner. It was controlled by the C-1931 control head. All the operator had to do was select the mode and freq and in about 30 seconds rx'er, tx'er and ant coupler where tuned and ready to go. Marine's took the set and mounted it on a jeep. It was the AN/TRC-75. Very advanced radio for it's time. Freq stability was incredible. Rated drift was few cycles per month!. There was a very good article about it in ER several years back.

Billy

Billy

Bwiggg@worldnet.att.net

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: Airborne SSB
Message-ID: <01ICZBUYTCB200L4JR@ACS.EKU.EDU>

>>>

...The word "Skyking" serves as a message routing indicator, and in this case, Skyking means "to all U.S. nuclear forces and support units. It being a force wide broadcast, the "do not answer" reference is self-explanatory."

<<<

Yup. I was a Missile Combat Crew Commander in SAC in the Minuteman missile system (ground based). A good many of the messages were part of a continuing testing of the communications system; and of course others were not.... How times change: SAC no longer exists... but of course the missiles do. Total communications for the missile force were really something, going from LF to UHF, wire, etc. So important

that any message get through always...

73, A1 N5AIT
modsteph@acs.eku.edu
Allan Stephens
Richmond, Kentucky

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: Airborne SSB
Message-ID: <01ICZCT64RV600L4JR@ACS.EKU.EDU>

What Dube said concerning the movie "Fail Safe" was right on. There was no piece of equipment set to transmit a "GO" code (which was the basic premise of "Fail Safe," where an equipment failure resulted in the "GO" code being transmitted. Positive control included NO person or piece of equipment having the code. It had to start with the president, and at each step of the way it was humans, not machines, which would have passed along such a message, with an incredible system of checks and balances in place to prevent an accidental or deliberate unauthorized launch.

One thing we had in the missile "capsule" was an HF radio connected topside to a "discage" antenna which put out a beautiful signal from 2-30 MHz. It operated on 1 kHz increments with thumb wheel frequency tuning... and occasionally when we did not have the HF monitoring responsibility (one capsule in five in the squadron would have that duty - monitor the SAC HF freq for the rest of the squadron) I checked in on the county hunter net on 80 meters from our location in Montana... As I reca

Don't recall the designation on the HF set - but believe that it was at least part tubes (finals - rated at 1 kw xmit)

73, A1 N5AIT
modsteph@acs.eku.edu
Allan Stephens
Richmond, Kentucky

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996

From: John Kolb <jlkolb@cts.com>
Subject: Re: Airborne SSB
Message-ID: <Pine.SCO.3.91.961213224201.13293B-100000@sd.cts.com>

On Sat, 14 Dec 1996 MODSTEPH@ACS.EKU.EDU wrote:

> One thing we had in the missile "capsule" was an HF radio
> connected topside to a "discage" antenna which put out a beautiful
> signal from 2-30 MHz. It operated on 1 kHz increments with thumb
> wheel frequency tuning... and occasionally when we did not have the

In the main transmitter room aboard the Commander Seventh Fleet flagship, we had a locked box, about 3 ft cubed, whose contents were "top secret". Outside and on top of the box was a Hallicrafters MHS-402. (Page 179 of Dachis). I wonder if this system was for possible use with the SAC system?

John

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: Airborne SSB
Message-ID: <Pine.SUN.3.95.961214004528.21600A-100000@coyote.rain.org>

SAC Giant Talk (Air/Ground) Net:

Site	Station	Airborne CP
Offutt AFB, NE (HQ SAC)	MIGRATE	LOOKING GLASS
Barksdale AFB, LA (HQ 2nd AF)	RETAIL	ACHIEVE
Westover AFB, MA (HQ 8th AF)	OUTWEIGH	GRAYSON
March AFB, CA (HQ 15th AF)	DEMOCRAT	STEPMOTHER
Joint Chiefs of Staff	DISCORD	
All SAC aircraft	SKYKING	
All SAC ground stations	SKYBIRD	

SAC Point-to-Point Net:

Offutt AFB, NE (HQ SAC)	PARKWAY
Barksdale AFB, LA (HQ 2nd AF)	PAYROLL
Westover AFB, MA (HQ 8th AF)	POKERFACE
March AFB, CA (HQ 15th AF)	CAPSULE
Torrejon AB, Spain (HQ 16th AF)	CIVILIAN
Ramey AFB, P.R. (gateway stn)	FORTYNINER
Goose Bay, Labrador (8th AF net)	GIBSON
Hickam AFB, HI	FATIMA

Kadena AB, Okinawa	DEMIJOHN
Anderson AB, Guam (gateway stn)	PORT WINE
Net call (all stations)	BRAGGART

Ramey and Goose Bay acted as relay or "gateway" stations between CONUS and Europe; Anderson acted as relay for the Pacific.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: Airborne SSB
Message-ID: <01ID087RFVRM00L914@ACS.EKU.EDU>

John wrote..>>>

The story goes that during one of the exercises back in the late 70's, that someone messed up one of the test msgs and left off the "this is a drill" part, so the people making up the coded msgs thought we were really being attacked. I heard that all of a sudden that the voices were no longer the calm, cool, bored sound "Sky King, Sky King, this is ." but rather frantic sounding.

<<<

Except that a "go to war" message would not be so encoded. The actual message had a specific format (the format itself classified SECRET) with similarly classified code words which would, should the message be sent, be sent in the clear with no question of what message was being sent. The message had to be word-for-word exactly as the format specified - and then the "GO" code would have to be transmitted as part of that message. GO codes are TOP SECRET and sealed at all launch locations (somewhat simplified description - some more to it), and the message would have to be (1) the correct word-for-word message, NOT encoded, and (2) the GO codes would have to match the ones in place out at the launch sites. This does not come close to happening by accident, or encoded where a mistake in decoding could trigger an unauthorized launch.

Diferent story I heard was when the (then) new radar went on line on the DEW (Distant Early Warning) line, and picked up what appeared to be a launch from the other side.... and turned out to be the mon coming over the horizon.

Probably an equally accurate story, but makes good reading!

The sasfeguards for the nuclear force were incredible, designed

to absolutely prevent accidental or intentional unauthorized launch short of war. Figure that if war came, the entire concept had failed (Deterrence, remember?).

Sorry to take so much bandwidth - opened up a bunch of memories (including all the incredible comm systems, and the idea of the then-classified EMP problems). RE the latter, I knew my equipment would not be knocked ut by an EMP (not being sand-state even then). Now

what would happen to the ionosphere is another story...

73, Al N5AIT
modsteph@acs.eku.edu
Allan Stephens
Richmond, Kentucky

LOOKING FOR (WTB): Multi-Elmac M-1070 ps
Harvey-Wells APS-50 ps

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: mirage!pamars@uucp-1.csn.net (P.A.Marshall)
Subject: Re: Airborne SSB
Message-ID: <9612150045.AA20313@mirage>

ACS.EKU.EDU!MODSTEPH@uucp-1.csn.net writes:

>
> John wrote...>>>
> The story goes that during one of the exercises back in the late 70's,
> that someone messed up one of the test msgs and left off the "this is
> a drill" part, so the people making up the coded msgs thought we were
> really being attacked. I heard that all of a sudden that the voices
> were no longer the calm, cool, bored sound "Sky King, Sky King, this is
> ." but rather frantic sounding.
>

Maybe you are thinking of the time they did that with a EBS drill, was '69 or '70, it was a Saturday, early morning, not something I'm likely to forget. Maybe half the local b'casters pulled the switch, much running in circles, etc. at many of those remaining on air. I fired up the office AM rec'vr, if memory serves me correctly, the "K" stations were SOP, only "W" locations got the bad message. I remember that I was "sure" this had to be an error, but it was still a *long* 30min.

Al Marshall "Real Radios Glow in the Dark" almarshall@acm.org
1+219.665.5072 Mirage Computers, Inc. pamars@mirage.angola.in.us

"The lyf so short, the craft so long to lerne." - Chaucer

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: k1zat@dsport.com
Subject: Re: Airborne SSB
Message-ID: <Pine.GS0.3.95.961214202503.20409A-100000@puff>

Yea

On Sat, 14 Dec 1996, P.A.Marshall wrote:
> the office AM rec'vr, if memory serves me correctly, the "K" stations
> were SOP, only "W" locations got the bad message. I remember that I
> was "sure" this had to be an error, but it was still a *long* 30min.

I remember that incident. If I remember right the TV news interviewed an AF SSgt who was an operator (radio, teletype, dont remember which). His comment was something along the line of "we've sent a cancellation" and the TV guys said "Oh, you sure" to which he said "Maybe I better go send it again", turned around and went back into the building.

jd

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: km1h@juno.com
Subject: B&W 3565 Swinging Link Arms
Message-ID: <19961214.190212.7311.6.km1h@juno.com>

While rummaging thru the basement today I came across more stuff I forgot was here.

These are NIB and look to be for the large KW or so size coils as a guess. I have no catalog data to go by.

There are about 20 available. Sell singly or all; make offer.

73.....Carl

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: john <johnmb@pop.mindspring.com>
Subject: B&W6100 comes gently to life
Message-ID: <199612142036.UAA24870@mule1.mindspring.com>

I got a couple hours to look at the B&W 6100 I got earlier this year... a careful initial cleaning, switch and pot blasting and some ohmmeter

checks indicated that it looked ready for the variac...

I'm pleased to see that the new set of Penta 6146B's that are in there (?!) put out some RF on 80M anyway... was able to get about 50w in the AM/TUNE position, which is likely OK in this mode.

Little to no output is available in other bands, so there will have to be some careful exploratory surgery done... but there's no magic smoke leaks, and things appear to all be there.

Due to the fact that there is some minor chassis rust, and that the front panel has been splashed in some places with something that stained the paint, this rig (S/N 213) will never win the Councours but it's all original and will look great when working and cleaned up better.

My question: Has anyone actually USED one of these on the air.

It sure is a nicely built piece...

Best holiday wishes
/John

John Brewer AMI #24
WB50AU/4 Clayton NC
Always looking for Lysco, and other
lesser known commercial ham gear
from the 30s-60s.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: Spencer Petri <spetri@e-tex.com>
Subject: BA Alert!
Message-ID: <m0vYmA3-0000BwC@e-tex.com>

Hello gang,

There are 6 Eddystone receivers listed on the auction web. 1 ea. 830, 2 ea. 770R, 1 ea. 770U, 1 ea. 750, and 1 ea. S870. Dunno if price is for 1 or all but I believe for all???

Just thought I'd pass it on.

<http://www.ebay.com/aw/item=cgi6294>

Auction is over 12/14 17:41 PST

BTW these are from HF to UHF.

73 de Pete WA5JCI "no connection to nothing"

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Michael Crestohl <mc@shore.net>
Subject: RE: BA fest....
Message-ID: <199612141120.GAA01946@northshore.shore.net>

Hello Jerry:

Thanks for your message and I am sorry you didn't get any moral support from the locals but it isn't surprising. Boatanchor enthusiasts are few and far between and it takes something like the Net and the Boatanchors List to bring us all together.

I know for a fact that guys are afraid of the prospect of crossing the border with stuff. I still dislike the process but I accept it as part of being a dual national. No one likes to be under the scrutiny of law enforcement officials and the potential for having to answer many questions. Another hobby group I am associated with wanted to have a National Show on Toronto but it fizzled out because of the above reason. I hear Toronto isn't such a bad place these days but can you really expect much of a boost for Toronto from a Montrealer?

Your idea of a annual Boatanchor Convention is a sound one and perhaps it could be appended to a big hamfest or similar gathering. I would suggest Dayton OH, Rochester NH (Hosstraders) in May, Rochester NY in June or Gaithersburg MD in September as possibilities. My vote would go to Gaithersburg, Its a wonderful fest and we could have our BA-Con on Friday and Saturday. The flea market is Saturday and Sunday. There are hotels nearby and the venue is very centrally located right near Washington DC. There are a number of BA enthusiasts local to the area and so I feel that the idea is a good one but someone will have to volunteer to organize the event. The Gaithersburg hamfest is run by the Foundation For Amateur Radio and is VERY Boatanchor-friendly.

73 and best wishes for the Holiday Season....

-----Michael Crestohl W1RC -----mc@shore.net-----

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Bob Roach <KE4QOK@worldnet.att.net>
Subject: RE: BA fest....
Message-ID: <19961214155156.AAA22879@LOCALNAME>

At 11:21 AM 12/14/96 +0000, you wrote:

>Your idea of a annual Boatanchor Convention is a sound one and perhaps it
>could be appended to a big hamfest or similar gathering. I would suggest
>Dayton OH, Rochester NH (Hosstraders) in May, Rochester NY in June or
>Gaithersburg MD in September as possibilities. My vote would go to
>Gaithersburg, Its a wonderful fest and we could have our BA-Con on Friday
>and Saturday. The flea market is Saturday and Sunday. There are hotels
>nearby and the venue is very centrally located right near Washington DC.

Hello Michael,

I'll cast my vote for Gaithersburg as well. It would be a long drive for me
but not quite so far as New york or Canada. Sounds like loads of fun.

73 es TNX

KE4QOK Real radios glow in the dark.
Bob Power is no substitute for skill.
If it stayed up last winter, it was too small.
136 Hermitage Rd.
Newport News, Va. 23606 KE4QOK@worldnet.att.net [try here first]
(757)930-0348 bob.roach@sourcebbs.com

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: jproc@bellglobal.com
Subject: RE: BA fest....
Message-ID: <Chameleon.4.01.2.961214125949.jproc@>

> My vote would go to Gaithersburg,

Michael,

That certainly sounds reasonable to me. That's a 13 hour drive from Toronto.
If someone decides to volunteer an organize a BA-con in Gaithersburg or
elsewhere, I would strongly suggest to start planning now. The event is
may seem like a long way off, but time flys by rapidly. For those of us who
may be planning our vacation time for 1997, it would be very important to
announce a location the date ASAP.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: JBurgwynjr@aol.com
Subject: Re: BA fest....
Message-ID: <961214160209_1954013735@emout17.mail.aol.com>

Michael and Jerry, I would second the Gaithersburg idea mainly because of convenience and the boatanchor activity at that location. While I really like the Toronto area, I would have difficulty in the travel. Good idea that I hope will develop. John W4WAW

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "David M. Nance" <dmnance@roanoke.infi.net>
Subject: Re: BA fest....
Message-ID: <32B355D0.1206@roanoke.infi.net>

Michael Crestohl wrote:

>
> Hello Jerry:
>
> Thanks for your message and I am sorry you didn't get any moral support from
> the locals but it isn't surprising. Boatanchor enthusiasts are few and far
> between and it takes something like the Net and the Boatanchors List to
> bring us all together.
>
> I know for a fact that guys are afraid of the prospect of crossing the
> border with stuff. I still dislike the process but I accept it as part
> of being a dual national. No one likes to be under the scrutiny of
> law enforcement officials and the potential for having to answer many
> questions. Another hobby group I am associated with wanted to have a
> National Show on Toronto but it fizzled out because of the above reason.
> I hear Toronto isn't such a bad place these days but can you really expect
> much of a boost for Toronto from a Montrealer?
>
> Your idea of a annual Boatanchor Convention is a sound one and perhaps it

> could be appended to a big hamfest or similar gathering. I would suggest
event. The Gaithersburg hamfest is run by the Foundation
For Amateur
> Radio and is VERY Boatanchor-friendly.
>

I would also vote for Gaithersburg. But then, I was all for Toronto!

David
WB4SSE

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: pmills@A.crl.com (Phil Mills)
Subject: BA fest...hamfests in general
Message-ID: <199612142327.AA10326@A.crl.com>

This brings up something else.....

I think that we need to do more to spread the word about hamfests and weekend tailgate sessions. I for one have only been to ham fests in the Texas area plus a couple in Florida when I was travelling on business. For a sizeable meet coinciding with a BA meet, I would be willing to do some serious driving.

There was a post earlier today about tailgate sessions in Ft. Worth. I've seen Pete's regular posts about the Dallas sidewalk sale but this was the first I'd heard about serious activity in Ft. Worth. Maybe it is time for us to start posting to the BA list info on hamfests before they occur instead of after. I would be willing to drive to a nice sized meeting almost anywhere in Texas, Oklahoma, or Louisiana and would consider driving even further for really good meets elsewhere...but, I never hear about them unless they happen to be listed in QST...which, by the way, a lot of hamfests are not! I know of several "local" hamfests that I go to that are never listed in the ham magazines because the organizers never seem to bother or whatever.

In short, if something is going on in your area, put the word out!

thanks & 73,
Phil
.

Phil Mills, AB5TH ***** *****
pmills@a.crl.com
281-992-5762 days
Friendswood, TX (south of Houston)

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: John Kolb <jlkolb@cts.com>
Subject: Re: BA fest...hamfests in general
Message-ID: <Pine.SC0.3.91.961214170518.19224B-100000@sd.cts.com>

On Sat, 14 Dec 1996, Phil Mills wrote:

> In short, if something is going on in your area, put the word out!
>

OK, the San Diego, CA area has a monthly electronics swap meet the first Saturday, at the Santee Drive In. There's another one on the 3rd Sat. same place, but hardly any radio types show up for it, just computers.

John KK6IL

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Bleeding Fingers
Message-ID: <UPMAIL03.199612150016560053@msn.com>

Hi Guys,
Well I had a little time to work on the HT-32 Function switch. Think with a little shim, I will get it working properly. The wear is on the clip side towards the knob.. If youve been there, you know what iam talking about. Now, if I get that right, comes the job(Shutter) of wiring it back in.

Will let everyone know.
Your Friend Al
fritsche@msn.com

BTW - Gary Harmon. Got me a brand new MFJ key/sounder today. Will make it easier to practice.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: ARONGV@aol.com
Subject: CAPs and Heath Colors
Message-ID: <961214010310_1087101766@emout04.mail.aol.com>

Carl, et al...

Thanks for the response on checking those variable caps. And thoughts on engineers at mfgs is right on.

Some years ago, I got a full tour of the Heathkit plant in Benton Harbor. What an experience. The building was like the size of three or four football fields. But what I learned that day I think is worth passing along.

I noted that the top and bottom of the rig cabinets were not made at the same time. But that's not unusual.

The unusual part was that the cabinet parts were painted at different times. In fact, there was more than one "standard" Heathkit ugly green.

I've seen grown men at swap meets almost throwing punches because they both had an idea of what Heath Green looks like.

After returning home, I ordered a DX-60B. And guess what? The top and bottom parts of the cabinet were "Not Exactly" the same green!

73's Ron WZero0IZ

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: "Joseph W. Pinner" <kc5ijd@net-connect.net>
Subject: CARC mil paint
Message-ID: <199612141513.JAA21040@dns1.net-connect.net>

While we are on the subject of toxic substances on mil/boatanchor radios, can anyone give me an idea of the danger, if any, of CARC (chemical agent resistance coating) paint used on more recent mil gear.

I have several pieces (including a RT-524A) which have CARC paint. Any precautions to take?

73

Joseph W Pinner
Lafayette, LA
KC5IJD
EMail: kc5ijd@net-connect.net

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: CRYSTALS TO SWAP

Message-ID: <199612140333.WAA13318@northshore.shore.net>

Hello Gang:

I have some crystals I'd like to swap. These are FT-243 holders and are on: 3792, 3794, 3798 KCs. I'd swap them for other FT-243 crystals in the CW portion of 80, 40 or 20 meters or 3885 in the phone portion.

73, Michael Crestohl, W1RC, mc@shore.net Cambridge Vermont 05444-0024

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: michael.hopkins.1171@corvus.com (Michael Hopkins)
Subject: Fort Worth sale
Message-ID: <96121411003734294@corvus.com>

A light mist greeted the 25 or so showing ham gear at Fort Worth' Hardin' Electronics monthly tailgate sale this morning. The usual collection of Yaesucom was evident as always, but a few classics were seen. A pair of Edlco twins with p/s and speaker was shown for \$225 and a Hallicrafters S-53A, the 455KC IF model, for \$25 asked.

Green case collectors would have noted a 6-Meter SB-110 offered without posted price, and one of the early keyers for \$25 twhile two of the late model Heath amps lurked in trunks. Vacuum tube collectors would have no trouble stocking stuffing with tubes as low as \$1 each in the competitive Dallas-Fort Worth market being stoked by recent entry Kent Britain, WA5VJB, long time seller John Long, and the influence of the metroplex's Vintage Radio and Phonograph Collectors club which also has monthly tailgate sales.

In fact, there exists a local circuit of tailgatesales which would allow one to trade gear every Saturday but the 5th in the month.

* SLMR 2.1a *

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: Robert Fowle <hammarlund@jacksonmi.com>
Subject: FS: Conversion manuals Vol. 1-2-3 & CQ Tech series
Message-ID: <32B31E94.C1F@jacksonmi.com>

Hello All:
have the following for sale, plus shipping.

CQ Tech Series Surplus Conversion HB including Comrad sets scuffs on
cover...other wise, like new
Surplus Radio Conversion Manual Vol.#'s 1,2, & 3 like new

sell all four of above as one lot \$100
if interested, email me...first person gets them...

--

**** Please, Visit my Web Page.....****

=====]-[->

Robert Fowle KC8DBC
1215 Winifred
Jackson, Mich. 49202-1946
Ph. 517-789-6721
E-mail: hammarlund@jacksonmi.com
Web Page: <http://www.jacksonmi.com/hammarlund>

NOW... BOATANCHORS Conference!
talk, buy-sell-trade all in one place!
Moderator: Robert Fowle
at: <http://www.inetnc.com/hamchat/>

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: rlahlum@juno.com (Ross J Lahlum)
Subject: FS: Halli S20R
Message-ID: <19961214.095735.3566.8.rlahlum@juno.com>

I've been holding onto this BA for years hoping to get around to it.
At this point I need to make some room in the shack & attic so maybe
it's time to turn it over to someone who will be able to work on it.
Condition is far below collector's quality. Someone painted it yellow,
for one thing. Bottom plate is missing. Dial glass is gone, band-
spread dial is hand-printed, and on & on...

On the plus side, it looks like it has all original parts & tubes.

Inside is
dusty but I did have it working 5-6 years ago. I know, people *hate* it
when items are advertised that way, but my position is that I don't want
to spend any time on it, so I will simply disclose what I know about it.
>From the looks of the resistors underneath, I'd say it was built in the
late 30's
(radial leads rather than axial).

I don't know what to ask for it, so this is a shot in the dark - \$40.00
or best offer
plus shipping.

73,
Ross KB9JJR
rlahlum@juno.com

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Mark Hovda <hovda@fyiowa.infi.net>
Subject: FS: Manuals & Books
Message-ID: <32B376DC.7128@fyiowa.infi.net>

I have the following for sale. Prices include book rate postage to US.
First to reply gets the book(s). E-mail replies only.

ARRL Material

1. 1938 ARRL Handbook. One half of spine covering missing, spine taped,
cover loose. Otherwise the binding is tight and the pages are in VG
condition. \$25
2. 1964 ARRL Handbook. VG cond. 50th ARRL anniversary edition. \$17
3. ARRL A Course in Radio Fundamentals, George Grammer, first edition,
1942. Excellent. \$20
3. ARRL License Manual, Wartime Edition, January 1943, cover loose,
otherwise good. \$12
4. ARRL Hints and Kinks, Vol. 2 1937. 1/2 cover torn off. Otherwise
very good. \$15
5. ARRL Hints and Kinks, Vol. 2 1937. Cover shows some wear, otherwise
very good \$20
6. ARRL Antenna Book, 5th ed., 1949. Cover shows some wear, otherwise
very good \$17

TUBE MANUALS

- 7. RCA Air Cooled Transmitting Tubes, 1938 ed., NO COVER, first page missing, otherwise good. \$15
- 8. RCA Receiving Tube Manual, 1966, very good, \$12
- 9. RCA Receiving Tube Manual, 1940, no cover, otherwise very good, \$8
- 10 Sylvania Technical Manual, covers receiving tubes, 1955, exc cond. \$14

HEATHKIT MANUALS

- 11. SB-610 Monitor Scope \$12
- 12. HD-15 Phone Patch \$6
- 13. TC-1 Tube Checker w/chart, fair to good cond., \$12

MISC

- 14. RME 45 Manual COPY, copy made by RME/Electro Voice in '58, fair cond. \$5
- 15. Radio Handbook Antenna Manual, 1948, Exc. Cond. Hardbound \$18
- 16. The Surplus Handbook, Vol. I Receivers and Transceivers, VG., \$25
- 17. HQ-145 Manual w/clock and calibrator sheets, good cond. \$20
- 18. Fall '52 Callbook. Cover worn, \$12

Thanks,

Mark
N0JWI

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: "Sandy Blaize, W5TVW" <ebjr@worldnet.att.net>
Subject: FT: USM-3 Test Set remnant
Message-ID: <19961214043511.AAA22111@LOCALNAME>

I have some bits and pieces of the USM-3 test set for trade.
Tube tester TV-4A/U.. cosmetically nice, it works! (Somewhere I have 'copies')

of the tube setting cards.)

Signal Tracer TS-673/U..dirty outside, complete, fairly nice inside. Not tried in 5 or more years. Yes, it really did work but I wouldn't guarantee it!

Transit case....Has the plastic inner cover, complete, no tools inside, DIRTY!

Needs a good cleaning and a paint job. Should restore OK with some TLC. Mechanically sound and complete.

The tube tester and signal tracer kept inside, the transit case has been stored in my garage!

Trade it for something I need, or something that sounds interesting. I'm looking for 5 pin 1' to 1-1/2" plug-in coil forms, National "BM" and "B" vernier dials, Raytheon

"RK" series transmitting tubes, a restorable National SW-54 receiver or NC-57 that

is in good cosmetic/mechanical shape, maybe in need of recapping/cleaning up/realignment/repair as long as no major part is missing or wrecked (power transformer

excluded) or what have you?? Always interested in HF military gear (small stuff-TRC/PRC stuff.) What the heck have you?

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

Looking for: ELMAC PMR-7/PMR-12, Hallicrafters SR-75, 860 tubes

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996

From: Gary Youney <72302.2164@CompuServe.COM>

Subject: Hallicrafters screws

Message-ID: <961214132325_72302.2164_DHR29-1@CompuServe.COM>

I have obtained some of the OVAL HEAD 10-32 slotted machine screws used on some Hallicrafters gear front panels (I put them into my HT-32B, HT-33B, SX 115, and SX 1101A). I have 24 left (each rig uses 4). If you send me a note, followed by some sort of padded envelope with a stamp, I'll send you some for free.

First come, first served. These are exact replacements. I also have the ring washers they fit into (although these are easy to find).

73, Gary K5QT

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: Bob Marsh <bmarsh@hicom.net>
Subject: Heathkit Stuff Wanted
Message-ID: <32B31779.28D6@hicom.net>

Hi everyone,

I finally got my HW-16 finished, and the SB-301/401 is well on the way to being complete. Thanks to everyone who provided advice, information and the occasional pep talk. With your help, I'm actually starting to understand what goes on inside my radios. That was an unattainable goal only 6 short months ago. (You know, this stuff really IS addictive!)

I'd like to get some information on these rigs for a history file I'm putting together on each piece. I'm interested in cut sheets, advertisements and possibly catalogs or other books on Heathkit gear.

Also, I would like to locate a Heathkit Keyer/Paddle combo, station accessories, test equipment and possibly an HW-101 for my next project. I'd like to put together a collection of Heathkits that's representative of the era. If you have anything, please Email me.

Finally, does anyone know if there's a Heathkit listserver or any WWW sites dedicated to Heathkit Amateur Gear?

Thanks again to all, and I hope you have a great Holiday.

73 de Bob/KB2SGM

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "David A. Cooley" <cooldave@ipass.net>
Subject: Help with xformer...
Message-ID: <1.5.4.32.19961215010221.006945e8@mail.ipass.net>

Hello all,

I have acquired a transformer to use in making a 12 volt power supply for mobile equipment in my home shack... It appears really old! Westinghouse makes it, and it is a rectangular can, 4.25" X 4.75" X 6.25" tall. It is potted in what appears to be asphalt.

It is a Type EP single phase xformer, 0.50 KVA dual primary for 120 or 240 volts (series or parallel of the primaries) 32 volt out. Style is S10N32S51B, frame number 71.

I currently have the primary's wired in series for 240, but run them from 110 with a 16 volt output to the bridge, then into my regulator and pass transistors.

What I would like to know, is since I am basically running it from 1/2 input voltage, will my current carrying ability be lowered or the transformer overheated from this?

Thanks,

Dave

```
=====
David Cooley N5XMT                Packet: N5XMT@W4RAL.#RTP.NC.USA.NOAM
Internet: cooldave@ipass.net      And Web: http://www.ipass.net/~cooldave/
Sponges grow in the ocean... Wonder how deep it would be if they didn't!
=====
```

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996

From: "R. Eric Sluder" <sludere@gte.net>

Subject: Hickok 6000

Message-ID: <32B259C7.1333@gte.net>

Season greetings to one and all!

I've been on this list for a short while now and have been lurking in the background. I thought it was good and time to come out of hiding -- I've got a question or two and know that someone out there knows all about Hickok tube testers and can enlightening me!

I recently purchased a Hickok 6000 tube tester (working state unknown at this time) and was wondering if it is considered a good tester to have or not? At the ripe ol' age of 31, most of this BA stuff was created before my time, so I'm in a bit of a catch up phase on this (NEAT) technology so please excuse the remedial questions!

Also, are there any folks out there who repair/refurbish testers (if needed)?

Any insight would be greatly appreciated.

73,

Eric Sluder, KB9BGS
sludere@gte.net

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996

From: rhys@ix.netcom.com (Lawrence D. Wolken)

Subject: Hickok 6000

Message-ID: <199612141550.HAA21862@dfw-ix1.ix.netcom.com>

Hi Eric & the gang --

I've recently had the good fortune to pick up a Hickok 6000A in mint condition. I've already tested about 100 tubes with it and I have to say it's one of the nicest pieces of test gear I've ever owned new or vintage.

I'd never had a good tube tester before and having had much experience with the drug store types, I thought that's what they all were like. What a difference -- accurate, replicatable, meaningful results. It's amazing for example to see the difference in gain between a 12AX7 & and a 12AX7A.

The difference between the 6000 and the 6000A is that the 6000A will do compactrons and a few other tubes types without the "adapter". All (ten?) of the tube sockets are on a small raised sub chassis which could be removed with two screws and replaced with the adapters that had other sets of sockets on them. The adapters plug into the main chassis with (of course) an octal plug. I would imagine that if they didn't come with your unit that you'll never find them now.

There are no adjustments other than one pot at the meter and I saw no signs of any way to calibrate it. It has two rectifier tubes and that's it. Contact me if you would like a schematic or roll chart.

While this baby will not do the older tubes like the TV-7 will, I've heard people say that if they only had one tube tester this would be the one. You done GOOD. enjoy!

73

Larry Wolken N30JD

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: rhys@ix.netcom.com (Lawrence D. Wolken)
Subject: Hickok 6000
Message-ID: <199612141712.JAA03594@dfw-ix3.ix.netcom.com>

At 08:03 AM 12/14/96, you wrote:

>Larry I have a 6000A with all of the manuals and the supplemental
>charts. Only have one socket assembly. Is there a date on the roll
>chart to go by as far as revisions are concerned.

>

>It is a great tester for sure.

>

>"Hank" KN6DI

>=====

Hank and the gang --

The "adapters" were an option. There are possibly two that you might have wanted for the 6000 -- one that does compactrons (not necessary for the 6000A), nuvistors, and jumbo 9 pin tubes and the other adapter did nuvistors (for the 6000A).

On the roll charts -- you basically subscribed to the updates just like a magazine subscription (tell me these guys didn't know their marketing). My 6000A came with two or three extras that had never been attached. They had dates at the top of the roll.

=====

BTW as long as we're on the topic of tube testers --- does anybody have any experience with the RCA WT-100A? It was a tester that sold for over \$1,000.00 in the early '60's. (Would that be like \$15,000 today?) You could apparantly plug in whatever real circuit parameters you wanted such as plate voltage, and plate grid and cathode resistance and watch how the tube would perform in your particular circuit. Was it ever made and do any survive? I'd love to know.

73

Dr. Electrode

Larry Wolken N30JD

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996

From: "Dick Dillman" <ddillman@igc.apc.org>

Subject: HW-9 Question

Message-ID: <88465.ddillman@igc.apc.org>

If anyone is familiar with the HW-9, please zap me an email. I have some questions about this set. Tnx.

Dick Dillman

WPE2VT W6AWO

<ddillman@igc.apc.org>

Collector of Heavy Metal:

Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996

From: "Mark J. Blair" <mblair@gruumsh.irv.ca.us>

Subject: Mark's military radio collection

Message-ID: <199612142209.0AA06441@gruumsh.irv.ca.us>

Here's my green radio/test equipment collection, in no particular order. I love to ramble on about these hunks o' junque, so send me an email if you're curious about them.

TYPE UNIT or SYSTEM	ORIGINAL or MODIFIED	COMPLETE or INCOMPLETE	WORKING or PROJECT
RT-196/PRC-6	Original	Complete	Working 51.0 MHz
RT-196/PRC-6	Original	Complete	Working 51.0 MHz
RT-196/PRC-6	Original	Complete	Project 53.2 MHz
RT-176A/PRC-10 (AKA PRC-10A, have batt. case and all accessories, but use with AM-598/U, missing mounting plate for AM-598/U)	Original	Incomplete	Working
RT-176/PRC-10 (have batt. case but use with AM-598/U, missing mounting plate and some accessories)	Original	Incomplete	Project
AN/VRQ-3 (2x RT-68 w/ mount, missing one PP-109, xcvsrs functional but need some work, C-435 has bad meter)	Original	Incomplete	Project
BC-221M (prev. owner's homemade power supply removed, holes remain)	Modified	Complete	Working
AN/VRC-7 (replaced bad ballast with homemade plug-in solid state unit, but otherwise original)	Modified	Complete	Project
AN/PRT-4A (with mount, I mean helmet)	Original	Complete	Working 51.0 MHz
AN/PRR-9/XE9	Original	Complete	Working 51.0 MHz
RT-60 (bail-out radio, no plans to restore)	Original	Incomplete	Display piece
R-392 (radio only -- no mount, but otherwise complete)	Original	Incomplete	Working

Trimpack GPS rcvr (I don't know the AN number for this)	Original	Complete	Working
TV-7D/U (missing original adapters and plate cap cables)	Original	Incomplete	Working
TV-7D/U (had to buy this one to get a replacement meter for my good one!)	Original	Incomplete	Scrap heap
R-110 (originally a parts unit, but now I feel guilty... this one will need a lot of work!)	Original	Incomplete	Project
RT-175/PRC-9 (organ donor for the PRC-10 and PRC-10A)	Original	Incomplete	Scrap heap
USM-117 (o'scope, MX-2996B plugin, missing all accessories, case cut to accept different power cord, flyback whines loudly)	Modified	Incomplete	Project
URM-96A (inline directional power meter)	Original	Complete	Working
URM-86A (terminating power meter, just have the resistor, no meter)	Original	Incomplete	Working

 While we're on the subject, here are some wants and don't-wants. The wants are low-priority back-burner things, which is why I haven't been actively asking about them on the list. The MT-298 is heavy and big, so I'd rather not ship the beast.

WANT:

- * mount for R-392
- * T-195 + mount (AFTER I buy a house to hold it!!)
- * R-110 parts: lamp cap, ballast, crystals, thermal relay, new tuning drive, misc. knobs
- * mounts for AM-598/U (x2)
- * MT-297 or MT-299 (I'd like to turn my VRQ-3 into a GRC-7 or VRC-10)
- * M1026 HMMWV (mobile mount for my Trimpack :-), need to win the lottery first)
- * TV-7D accessories (plate caps, adapters)
- * Meter for URM-86A terminating power meter

DON'T WANT:

- * MT-298 (I'd like to turn my VRQ-3 into a GRC-7 or VRC-10)

* Heath HR-10 receiver (needs work)

--

Mark J. Blair KE6MYK
e-mail: mblair@gruumsh.irv.ca.us

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Larry Godek <AZCOT@gnn.com>
Subject: Re: Megahertz Electronics???
Message-ID: <199612141342.IAA12671@mail-e2b.gnn.com>

They used to be over in West Phoenix. I haven't seen either of the two fellows around for some time. They always used to be at all the hamfests with a big wad of money in their pockets buying stuff. Don't know if they are still or if they still have their big building stacked with gear or not.

>Date: Fri, 13 Dec 1996 15:22:32 -0600 (CST)
>From: ARONGV@aol.com
>Sender: boatanchors@theporch.com
>To: Multiple recipients of list <boatanchors@theporch.com>
>Subject: Megahertz Electronics???
>
>
>Help:
>
>Someone left a message for me about where I could find some 8236 tubes. The
>reference was to a company called Megahertz Electronics.
>
>Unfortunately, I must have copied down the E-mail address off by one number
>somewhere.
>
>I reckon I must have "Oldtimers Disease"....or something.
>
>Ron WZeroOIZ
Larry Godek W00GH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TA0, KN6TUP

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: jproc@bellglobal.com
Subject: Re: Military fans: What's in *your* collection
Message-ID: <Chameleon.4.01.2.961213221327.jproc@>

Dave,

Here is my list of military equipment. I have also listed the equipment aboard the ship since I have manuals and some expertise on all of it.

PERSONAL COLLECTION

TYPE UNIT or SYSTEM	ORIGINAL or MODIFIED	COMPLETE or INCOMPLETE	WORKING or PROJECT
BC-453 Rcvr 190-550 Khz	Original	Complete	Project
BC-454 Rcvr 3-6 Mhz	Modified (Fil mod only)	Complete	Working
BC-455 Rcvr 6-9 Mhz	Modified (Fil mod only)	Complete	Working
BC-457 Tx 3-4 Mhz	Original	Complete	Project
BC-348 Rx	Original	Complete	Working
Marconi CSR5 Rx 80 khz - 30 Mhz	Original	Complete	Working
Marconi FR12 Rx/Tx LF/HF	Original	Complete	Working

ABOARD HMCS HAIDA

TYPE UNIT or SYSTEM	ORIGINAL or MODIFIED	COMPLETE or INCOMPLETE	WORKING or PROJECT
CPRC26 FM Walkie- Talkie; 47-54 Mhz (2 pcs)	Original	Incomplete	Project

BC221 Freq Meter	Original	Complete	Working
RAK Rx 15- 600 Khz	Original	Complete	Working
RCK Rx 110-1609 Mhz	Original	Complete	Working
SCR-522 Tx/Rx (100-156 Mhz)	Original	Incomplete	Project
TDQ Tx 110-160 Mhz	Original	Complete	Working
AN/URR35A Rx 200-400 Mhz (7 pcs)	Original	Complete	Working
TED3 Tx 200-400 Mhz	Original	Complete	Working
Marconi CSR5 Rx (5 pcs)	Original	Complete	Working
Marconi PV500 Tx (3-19 Mhz)	Original	Complete	Working
Marconi B28 Rx (British/Military)	Original	Complete	Working
Marconi CM11 Rx/Tx (2 pcs)	Original	Complete	Working
Marconi CM11 Rx/Tx (1 pc)	Original	Complete	(Unservicable)
Marconi FR12 Rx/Tx LF/HF	Original	Complete	Working
Marconi MSL5 LF Rx 15-600 Khz	Original	Complete	Working
Marconi FM12 MF/DF 42-1060 Khz	Original	Complete	Working
TMC Antenna Multi- Coupler AMC 6-2 2-30 Mhz	Original	Complete	Working

AN/SGC1A Teletype Original Complete Working
Terminal Unit

Note, that the Marconi equipment was heavily used by the Canadian Navy but may have been offered in the commercial marketplace as well.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: gpewitt@execpc.com
Subject: Military Gear
Message-ID: <Chameleon.961214152405.gpewitt@execpc.com.execpc.com>

Here's my small but growing collection of military gear:

Type of Equipment	Original or Modified	Complete	Working or Project
R388	Org	Yes	Working
R390	Org	Yes	Project
R390A	Org	Yes	Working
R392	Org	Yes	Working
SP600	Org	Yes	Working
TMC VLRE-1	Org	Yes	Working
CV31D/TRA7	Org	Yes	Working
SG111/URM25E	Org	Yes	Working
TV7D/U	Org	Yes	Working

Name: Gary Pewitt N9ZSV/KT
6120 W. Calumet Rd. Apt 204
Milwaukee, WI 53223
414 355 8147 Home 414 297 4307 Work

E-mail: gpewitt@execpc.com
From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: Tom Norris <badger@telalink.net>
Subject: Military Gear
Message-ID: <3.0.1.32.19961214204942.006b83b0@telalink.net>

Here's my small but growing collection of military gear:
In no particular order....

Type of Equipment	Original or Modified	Complete	Working or Project

R-392/URR	original	yes	working (2)
T-195/URR	original	yes	working
R-390A	original	yes	working
AN/GRR5	original	yes	1 working
		1 project	
IP-805	original	yes	working
BC-314	original	no case	project
CV-278	original	yes	no meter, almost works
I-177/U	original		basket case, but the case is good!
TS-352/U	original	no accys	working
URM-65D	original	no accys	working (when it gets here)
TV-7A/U	original	yes	working (when it gets here)
R-274/FRR	original	yes	caps project (when it gets here)
CDV-700	original	yes	working, calibrated

Fluke 77/AN (hey it *is* the military version, and I do use it for working on BA's)

Assorted bits and pieces, chassis, carcii, and detrius not identifiabile, but formerly military.

73 and Happy holidays!!!!

Tom Norris KA4RKT
badger@telalink.net Nashville, Tennessee, USA

Eagles may soar free and proud, but weasels
never get sucked into jet engines.

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: J P Taillebois <jpt1@idirect.com>
Subject: Military stuff
Message-ID: <199612141533.KAA10534@nemesis.idirect.com>

Well,
Finally on my way to see the list in Orillia.
Thanks for all the info you have provided me.
Looks like it could be very interesting lot.
Will report back this evening with my findings.

73

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: More "Tube Life"
Message-ID: <32B24FF6.321F@n-link.com>

What about zero-crossing detectors? (Yeah, I know they're solid state) I seem to remember reading about those little devices that turn on as the applied ac voltage makes the transition from positive to negative (and/or vice versa). This would insure that the instantaneous voltage applied would never be at its peak value when the unit's fired up.

--

Dube Todd

dube3@n-link.com

Tell yourself NO now and then; it's good for you.

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: More "Tube Life"
Message-ID: <Pine.ULT.3.95.961214132042.4568C-1000000@admin.aurora.edu>

On Fri, 13 Dec 1996, D.D. Todd wrote:

> What about zero-crossing detectors?

The problem with zero crossing detectors is that you are still applying the voltage too fast. The AC line goes from zero to full peak in 4 milliseconds. You really need several seconds minimum to give the filament a chance to heat up and the current to drop.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: merrigan@ee.ualberta.ca
Subject: More High Quality Manuals
Message-ID: <199612150114.TAA05894@uro.theporch.com>

With exams being over, I have had some time to devote to the HQ Manuals project.

I have added a couple of Hallicrafters manuals to the list, as follows:

Hammarlund SP-600 Operator's manual
Hammarlund HC-10 Converter manual
Hammarlund HQ-180 manual
Hammarlund HQ-180A manual
Hammarlund HQ-145A manual
Hallicrafters SX-101A manual
Hallicrafters SX-117 manual
R390A Operator's manual TM 11-5820-358-10

Schematics available as well.

Email me for more information.

Shaun Merrigan

--

merrigan@nyquist.ee.ualberta.ca
Electrical Engineering Student
University of Alberta
Edmonton, Alberta, Canada

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: Sheldon Wheaton <swheaton@sky.net>
Subject: Need Viking II interstage xfrmr
Message-ID: <Pine.GS0.3.93.961214152235.20730C-100000@sky.net>

Greetings!

A good friend of mine needs the speech amp interstage XFRMR for his Vik II. He might consider a complete parts rig as well.

Please reply to me if you can help out.

73,
Sheldon

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "Grant Youngman" <nq5t@gte.net>
Subject: Re: Need Viking II interstage xfrmr
Message-ID: <199612150015.SAA10804@smtp.gte.net>

> A good friend of mine needs the speech amp interstage XFRMR for his
> Vik II. He might consider a complete parts rig as well.

Been a while since I've seen this subject mentioned, so it might be time for a refresher ...

Antique Electronic Supply sells a transformer that is a fine replacement for the original, and more robust (higher current capacity). The part is P-T20D89, for \$12.95. Cheaper than a "parts rig" if the xfrmr is all you need. AES is at 602/820-5411.

Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
<http://home1.gte.net/nq5t/index.htm>
Double Oak, TX -- nr Dallas

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: DArney@gnn.com (Dan Arney)
Subject: R-390 non A list
Message-ID: <199612141623.LAA24367@mail-e2b.gnn.com>

Dave here is all of the info for my 390. S/N219 Order # 90-PH-52 Motorola. In use, operating. The only problem with the unit is the ant. trim knob is broken off flush with the front panel. I understand that it is a major job to get to the little bugger to replace it. My thought was to hold the trimmer and drill and tap the shaft to add a knob. "THOUGHTS" Suggestions appreciated. And are there any knobs out there floating around.

Thanks,

"Hank" KN6DI

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Tom Norris <badger@telalink.net>
Subject: R390 users list--Addendum
Message-ID: <3.0.1.32.19961214080010.006af854@telalink.net>

>Remember that Tom, N5OFF, has posted the serial number/contracts in the BA
>archives for those of you who really want to get into that kind of detail.
>
>I cannot find my copy of the final engineering report from Collins (must be
>buried under something important for more than a year). For those of you
>who have never seen this report and are in love with the 390's or the A's, I
>would highly recommend that you get a copy from perhaps someone on the
>group.

I would love a copy of that as well, if anyone has else could make copies of theirs.

Tom KA4RKT
badger@telalink.net

badger@telalink.net

Every morning is the dawn of a new error.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: km1h@juno.com
Subject: Re: Reformation
Message-ID: <19961214.004045.7119.49.km1h@juno.com>

On Thu, 12 Dec 1996 06:26:41 -0600 (CST) pmills@a.crl.com (Phil Mills) writes:

>Dick, I always use a Heath bench DC supply that will go up to 400 vdc.
>I slowly increase the voltage keeping the current under 10 mils until
>I reach the limit of the supply or the rated limit of the capacitor.
>After you've done this for a while, you will develop a feel for the
>condition of the capacitor based upon the time it takes...that is,
>how fast you can advance the voltage and still keep the current
>somewhere

>below 10 mils. I usually let it sit for a few minutes and the max
>voltage and see how far the current drops....if it drops down to just
>a milliamp or two then I know I got a really good cap....it hangs
>around 10 mils, then I've got a potential problem.

>
>

I too use a similar procedure Phil and it works well for me. I do however think that 10ma leakage is "in the trash can" category. Admittedly my application is usually a bit more severe than a BA receiver. Most of my testing is 80 to 220MF 450V caps as used in KW+ linear amps where the ripple current from a 2500-4500VDC supply into a series string of caps can cause severe heating.

I usually toss any cap that shows over 1-2ma of current....but have been known to recycle them into a 300V rcvr supply with no ill effects.

Typical import 450V caps as found in RS, etc are not suitable in a HV amp supply. They cannot handle the ripple current and I have had them literally boil and smoke here before I learned my lesson about cheap caps.

An excellent cap is the recent CDE, made in the USA, 381LX series. It is about half the size of a standard cap of equal ratings, has a 105 deg C spec and boasts high ripple current supply applications. I was skeptical but bought 10 about a year ago to play with. 8 of them went into a Heath SB220 amp; and to be honest I was amazed. They did not even get warm and the PS regulation is improved. I have since installed over 100 in various amps that come into the shop with a zero failure rate. They are available thru Mouser, etc.

Again, I am stressing high voltage amp service, not rcvr levels. It makes a big difference.

73.....Carl

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: Reformation
Message-ID: <199612141358.HAA04586@lesol1.dseg.ti.com>

One thing which hasn't yet been "stated" in this thread is that a variable HV supply having simultaneous voltage and current metering greatly facilitates the process of reforming caps. I now use an HV supply similar to the one Phil Mills talked about, a Heath IP-32. It's variable from 0-400 Volts and capable of providing up to 100 ma of current.

Before I latched onto the IP-32, when I reformed caps, I'd usually let whatever power supply I was working on do the reforming. I'd simply insert a series resistor. Due to the lack of metering, this was invariably a time-consuming process. Oh sure, I'd monitor the voltage across the resistor occasionally using a VOM and change the resistor value as needed, but somehow this was invariably time-consuming. What's more, being a little anxious about how the capacitors might be behaving, I tended to use low current levels which predictably made the process even longer.

When I got the IP-32, I was surprised at how much easier and faster the process of reforming caps became. With the IP-32, the process of reforming caps went from an ordeal to a trivial task. More importantly, it took the guesswork out of deciding how much current to use. The "rule of thumb" I found is that as long as the current is decreasing then the cap is reforming properly. If current is increasing, then the voltage needs to be decreased.

Old and tired electrolytics tend to be very individual and having good instrumentation when reforming 'em helps tremendously. YMMV.

Regards,
Bill Sorsby, N5BU bill.sorsby@dlep1.itg.ti.com
Grapevine, TX 76051

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Reforming Caps

Message-ID: <UPMAIL03.199612150016540160@msn.com>

Hi Gang, love to hear all comments about above said subject. If we didn't argue back and forth we would never know whats the right or wrong way.

Just for my input, Phil Mills is an extremely capable guy and I have used his tactics several times with good success.

Whatever works.....

Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Merv Schweigert <k9fd@htc.net>
Subject: Schematic needed
Message-ID: <9612141616.AA00401@ns.htc.net>

In need of the Schematic for the Knight V44 VF0. I have the manual, but missing the schematic. Any around ? Thanks 73 Merv

```

                //\\
                (#  #)
-----o00-( )-00o-----
:
: Merv Schweigert K9FD      Collector of Keys, "Bugs", :
: 9694 S. Prairie Road     Paddles, Code related gear :
: Red Bud IL      62278     Crystals and Old Heathkits :
: E-Mail k9fd@htc.net      Old National HRO NC101 Etc :
: Ph.      618-282-3953     Always looking please call :
-----
```

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: "Jim Zellmer" <zellmer@raccoon.com>
Subject: Shorted Triodes
Message-ID: <199612140507.XAA06677@slip1.raccoon.com>

A few days ago some John Zitzelberger W6GL of Thousand Oaks, CA mentioned something about shouted triodes. A few years ago when I first fired up my Invader 2000, one of the PL-175s was gassey. I found a 4-400 pull for \$10. It was cheap

because
it had been laying on its side in storage. The anode barrel sagged down
and was shorted
against the grid. After consulting with my hollow state elmer, I turned
the tube in a horizontal axis with the anode tilt up and gentle smacked the
tube against my other hand in a downward motion. About 3 gentle smacks
straightened the anode to a normal attitude.
I plugged the 4-400 in with the good PL-175 and the Invader 2000 was up and
running.
Sure do like the orange glow those bottles get when they are working.....

73 ES GOD BLESS U ES URS

JIM ZELLMER, KA0VSL

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Tom Norris <badger@telalink.net>
Subject: Some pics needed for The Mil List
Message-ID: <3.0.1.32.19961214074635.006a10f8@telalink.net>

Hello gang!!!!

Not sure if I have made this request to the list as a whole,
so will.
Am looking for your scanned pics of various military equipment
for inclusion on The Military Equipment List web page.
(<http://telalink.net/~badger/millist/>)

The usual item discussed here would be good for those
who havent seen them. Examples: R-390, 390A, 389, 391;
Tube testers, I-177, TV-2, TV-4, TV-7; Various command
gear, and other popular stuff. Got room for lots of stuff.
Also would like permission (yes, a blanket request) to use
pics from your pages.
Those wishing to send them on the net, use email, or FTP
to [ftp.telalink.net/users/b/badger/ftp/incoming](ftp://ftp.telalink.net/users/b/badger/ftp/incoming).

Line drawings from manuals would be good as well
as actual photos. Whatever you have would be greatly
appreciated.

Thanks again!!!!
And happy holidays

Thanks a lot for any help.

Tom Norris KA4RKT
badger@telalink.net Nashville, Tennessee, USA

Eagles may soar free and proud, but weasels
never get sucked into jet engines.

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: joelutz@juno.com (Joseph W Lutz)
Subject: Source for Heathkit 'Feet'
Message-ID: <19961215.022043.2878.0.JOELUTZ@juno.com>

Hi Everyone,

Need to replace front feet on my SB101 (and don't want to rob them
from my other Heath's), could someone point me to a source for same, or
should I just start going through all my parts catalogs to find some.
Appreciate any assistance.

Best Season's Wishes

73 de JOE

- - - - -W7LPF/4 (NNN0KUU)- - - - -
- - -

QWCA - NCVA - SOWP - FISTS
Gordonsville, Va 22942 (Orange County)
WTB: EFJ Adventurer, Hallicrafter HT32

- - - - -
- - - - -

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Step-Start (was Re: Tube Life)
Message-ID: <Pine.ULT.3.95.961214131030.4568B-1000000@admin.aurora.edu>

On Fri, 13 Dec 1996, Richard Hager wrote:

> Bob Roehrig wrote:

> >

> > In my modified Johnson Desk Kilowatt, I added inrush protection by
> > installing a 50 ohm resistor in series with the primary of the
> > filament transformer. 5 seconds after power is applied, a Amperite
> > thermal relay operates. It in turn operates a DPDT relay.

>

> > One set of its contacts shorts the resistor, applying full line
> > voltage to the filaments,

>
> Ouch!! That'll warm that tube up right quick!
>
> hee hee. Sorry Bob, couldn't resist...

Ya got me! That's what happens when you're tired. Should have said
"apply full line voltage to the transformer".

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: rlahlum@juno.com (Ross J Lahlum)
Subject: Telefunken Opus 6
Message-ID: <19961214.094007.3566.4.rlahlum@juno.com>

Sorry to take bandwidth but this is the only way...
Somebody in the group was looking for a service manual
for a Telefunken Opus 6. I have a copy ready to go, but lost
all my earlier e-mail last week due to a disk problem.
Let me know who you are (& your address) & I'll get it out to you!
73,
Ross KB9JJR
rlahlum@juno.com

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: DArney@gnn.com (Dan Arney)
Subject: Test Equipment List
Message-ID: <199612141609.LAA01947@mail-e2b.gnn.com>

Hi Gang, I had a big response for list of equipment. Will get one
together and post it shortly.
"Hank" KN6DI

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: DArney@gnn.com (Dan Arney)
Subject: Test Gear etc.
Message-ID: <199612140455.XAA12276@mail-e2b.gnn.com>

Richard,

I have a ton or so of test gear of all sorts. Also a lot of special

gear/servo programmers chart recorders pulse gear. microwave.BA/SS
mixed.

Is there a place or way to sell some or all of this at better than
scrap prices?

I see all of your comments and info so you and Larry along with
Hank Van seem to be the ones in the know here.

Thank,
"Hank" KN6DI

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: Test Gear etc.
Message-ID: <199612142031.NAA27250@netcom17.netcom.com>

As Dan Arney discourses

>
> Richard,
>
> I have a ton or so of test gear of all sorts. Also a lot of special
> gear/servo programmers chart recorders pulse gear. microwave.BA/SS
> mixed.
>
> Is there a place or way to sell some or all of this at better than
> scrap prices?

My own view on things (others may feel differently) is that a lot of
general-purpose instrumentation of the 1930-60 period is "valuable"
in the sense that it can be put back in good shape to wear a blue
collar doing work. I'd feel less optimistic about finding a use for
specialty test sets. Some of these were used with the type of
equipment that hams use for the ham radio hobby (i.e., transmitters,
receivers, exciters, etc.)----and some are full of things like 400 Hz.
synchros and not much electronics, and not particularly applicable to
working with receivers and transmitters.

I'd have to see a list of what you have, and probably wouldn't
recognize all of it, but some of the other folks here might be able to
fill in the blanks. I've bought a lot of stuff at hamfests that was
pretty sorry looking, and kicked under a table, that was still hanging
around at noon after all the HRO's, SP-600's R-390's, Globe
transmitters, etc. had all walked away at high prices. A lot of these
Ugly Ducklings came home with me, got the layers of calibration

stickers melted off them, and after some TLC inside, were ready to do what they did in 1948 and 1954.

>From a personal perspective, a large part of my enjoyment is to have, for my own use today, items that were top dollar capital equipment treasures when I started trying to wear a serious hat as an engineer forty years ago. That apprenticeship began with an in-depth on-the-job exposure to the idea that you can make accurate measurements, and do good design work, using simple instrumentation. This led to a career working in instrumentation that lasted twenty years, and that is still valuable to me today. So I get particular enjoyment out of working with this stuff, and think readers of this list will recognize this in my attempts to share with others some of the things I learned from some pretty sage old-timers.

>

So far as distinguishing between vacuum tube, hybrid tube-semiconductor-and all semiconductor stuff, I realize that the focus of this list is on vacuum tube-only equipment. But when you consider that the last of the all-tube Tek scopes were introduced in 1959 (581/5, 503)---and that the first "all-transistor" scope (321) came along only months later, you have to consider the value of inexpensive items (relative to first cost) like the 545B and 547, with 1A1 and 1A4 plugins, which were hybrid->all-transistor, on your bench. The 321 had nuvistors in it, which made it a hybrid. There are some interesting challenges involved in replacing sick semiconductors of the sixties, and getting the unit working again---but I've found it relatively easy to use common "dimey" silicon transistors in place of germanium stuff that hasn't be made in thirty years. From my personal perspective, I worked with a lot of hybrid instrumentation in the sixties, and so don't have any allergies toward working with or talking about early solid state stuff. Indeed, I think this is one area where there isn't much "expertise" anywhere on Internet-accessible lists or Usenet newsgroups.

Boonton Radio, General Radio, Measurements Corp, Ballantine, are all names that have vanished long since. "Genrad" has forgotten---and orphaned---its history, and I sense the Tektronix is about the same these days. I don't know about Hewlett-Packard or Marconi these days, but sense that HP has lost a lot of its expertise in handling things they made as recently as fifteen years ago. Anything that's got these names on them is good stuff, and should find new homes.

> I see all of your comments and info so you and Larry along with
> Hank Van seem to be the ones in the know here.

>

I'd be interested in knowing what you've got, and while I may not recognize a lot of the items, I think others on the list can fill in some of the blanks.

--

=====
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
=====

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Ronnie Hull <larebel@ms1.nwla.com>
Subject: Thanks
Message-ID: <1.5.4.16.19961214071948.1ea7a566@ms1.nwla.com>

Thanks to all you fellows who wrote to me regarding the Airborne SSB signals I used to pick up. Especially to Ray Mote, who made it all so clear. Funny, I live right across the river from Barksdale AFB, and as a young ham in the mid 60's got a tour of their communications facility (or.. the one they didn't mind if you saw!!!). I can remember the ready alert B52's on the runway's 24 hours a day, and the constant air traffic at that time.

That was a magical time for me, a young fellow with a BC348 and a converted command set transmitter. I used to sit for hundreds of hours tuning the 348 and listening to all sorts of things, sometimes late at night with no lite except the glow of the dial. Whoever said it was right "real radio's glow in the dark!"

I even heard an SOS from a floundering fishing boat in the Carribbean, got the position and called the Coast Guard with the information. They were already appraised of the situation, but it was good practice for a young ham anyway. How I wish my parents had not disposed of all that old gear while I was in the service...

Anyway, thanks fella's, ya'll are truly an amazing bunch of men!!

Ronnie

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: km1h@juno.com
Subject: Re: There's More To Caps
Message-ID: <19961213.215309.7119.24.km1h@juno.com>

Hello agn Ron, an excellent bit of info.

AND....a shorted driver variable on a NCX-3 or NCX-5 will blow the PS!

Off to a sub- subject:

Do you really think that the ham companies paid for top line engineers or pretty much got what was left over after the Military-Industrial gang took their pick? I sometimes wonder how some of this stuff got out the door. You cant blame it all on Marketing!

Many ham company types became superb engineers, well published, etc.; others just drifted around until retirement or spent a career in some third rate company.

National had its own pecking order. The parent company, National Company, with the govt contracts, and the National Radio Company subsidiary were often in a state of war over engineering qualifications. I never could figure who won!

What is the future for RF Engineers? Today it seems to be mostly cut and paste from application data in the LAN, PCS and similar industries. The scientists and computers create the devices.

Just some food for discussion.....Carl

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996

From: rlahlum@juno.com (Ross J Lahlum)

Subject: Tom Norris <badger@telalink.net>: R390 users list--Addendum

Message-ID: <19961214.095735.3566.7.rlahlum@juno.com>

>Remember that Tom, N5OFF, has posted the serial number/contracts in the BA

>archives for those of you who really want to get into that kind of detail.

>

>I cannot find my copy of the final engineering report from Collins (must be

>buried under something important for more than a year). For those of you

>who have never seen this report and are in love with the 390's or the A's, I

>would highly recommend that you get a copy from perhaps someone on the >group.

I would love a copy of that as well, if anyone has else could make copies of theirs.

Tom KA4RKT
badger@telalink.net

I'd like a copy too!

Thanks,
Ross KB9JJR
rlahlum@juno.com

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: km1h@juno.com
Subject: Re: Troubleshooting IF Cans??'s
Message-ID: <19961214.004045.7119.46.km1h@juno.com>

You're 100% correct Mike. After rereading my post I see I only mentioned that large series resistor one time.

Also the AN/URM-25D comes with the high impedance injection probe if you are lucky enough to get all the accessories that mount in the cover. It was all part of the signal injection step by step, stage by stage troubleshooting taught by the Navy; and other services I'm sure.

Three cheers for a real live Analog Engineer!

73.....Carl

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: km1h@juno.com
Subject: Re: Troubleshooting IF Cans??'s
Message-ID: <19961214.004045.7119.47.km1h@juno.com>

>The idea behind adding resistors between the sig source and the
>DUT (device under test) allows the sig gen to function as a
>zero impedance voltage source (to the rest of the circuit) and
>allows for impedance matching with the primary of the IF
>transformer. This becomes important if you want to see both
>where (freq.) and what the shape of the bandpass looks like.
>Mismatching on either the primary or secondary side distorts
>both values. At 455Khz the amount of error is not drastic,
>But it is clearly noticeable.
>At higher freqs. it can throw you waaay off.

>If your wondering is this IF can over, under or critically
>coupled... You need to do this right. (All effect the shape of
>the bandpass curves.)
>
>If all you want is to get somewhere in the ballpark, Carl is
>right... Lots of ways to get an idea of where you stand.
>If you want a good idea of the relitive "Q" of the DUT, put
>some extra effort into it, and try to match the impedances.
>
>There is lots to learn about this.... Far more than I know. :-)
>
>respectfully
>-Larry Ware
>lrware@pipeline.com

Excellent point Larry and I agree. But the reason I "glossed" over it was to stick to the original question posed and that was how to simply check the basic condition of a particular IF can without removing it from the radio and with a minimum of test equipment.

I also completely forgot to mention impedance loading from the genny since I am so used to using the high impedance injection probe that is part of the AN/URM-25D accessories. Thanks for waking me up! I just threw in the 9:1 balun as a way to very roughly step up impedences without the loss penalty of a resistive approach. Not that 450 Ohms is even close to the output impedance of a typical 455KHz mixer or IF tube.

There are probably as many damn good ways to approach the original request as there are BA readers!

73.....Carl

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: km1h@juno.com
Subject: Re: Tube life
Message-ID: <19961213.215309.7119.14.km1h@juno.com>

0

>If Hank is listening... can you shed some light on this one Hank? Is
>my
>memory faulty, or did they use 6.0 in some units?
>
> Richard Hager
>
>

Dunno about your "expert" advice or Tek, etc, but Eimac and other Power Tube manufacturers have been stressing this idea for decades. The operating life of tungsten filament tubes can easily be increased ten-fold by reducing the filament voltage.

A 5% reduction is an oft seen suggestion and generally works fine. However, the better test is to slowly reduce filament voltage until the power output just starts to drop and then increase voltage by a few tenths. How this relates to non-Power tubes I cant say but gut feeling says it is the same.

Before I get accused of practicing engineering without a license I refer you to the Eimac Book "The Care and Feeding of Power Tubes".

BTW, Eimac Glass Products Division has been sold to Triton Corp. This is just another step in the break-up of Eimac since Varian sold the complete subsidiary last year.

73.....Carl

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: Tube life
Message-ID: <32B24B2A.1B9@n-link.com>

Bob Roehrig wrote:

> Am I dense or missing something here? What's the difference between
> having a diode in series with a bulb to dim it and having a half
> wave rectifier in an AA5 radio? It's not like we are feeding DC
> back into the power line. The unsymmetrical load placed on the power
> grid because of only loading down one half cycle would be so minimal
> it would be unnoticed.
>

I agree with Bob. Time was when everybody and his brother had an "AC-DC" radio connected to the power lines. If rectifying the line voltage to obtain DC for the load was a problem, surely they'd have complained then!

--

Dube Todd

K4DWW

dube3@n-link.com

Tell yourself NO now and then; it's good for you.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: vancleef@netcom.com (Henry van Cleef)

Subject: Re: Tube life

Message-ID: <199612140746.AAA28655@netcom20.netcom.com>

As Richard Hager discourses

>

> Interesting....seems that I saw somewhere that Tek ran their tubes at
> 6.0v instead of 6.3, but I can't find the reference now.

>

> If Hank is listening... can you shed some light on this one Hank? Is my
> memory faulty, or did they use 6.0 in some units?

>

Well, Stan may remember some things I don't. I don't recall that there was any attempt at Tek to run small (6.3V 300 ma.) receiving type tubes at anything but nominal design center voltage on design center line voltage.

Last I looked at some of these tubes, they tended to "spring to life" on about 5.7 or 5.8 volts. That's only 10% below the nominal 6.3. Additionally, the standardization on 6.3 volt heaters in the early thirties was to allow operation on automotive electrical systems. On these, the voltage regulator is set to about 7.2 volts. Even allowing a couple hundred millivolts drop in the wiring and A-supply filter choke, the tubes saw around 7 volts in a car radio, and survived.

I have a distinct recollection that operation on low line was the critical issue generally considered and addressed in doing design at Tek. The test criteria was normal operation at 105 volts line, which is right on 10% below the mythical "117.5" design center established in the 1930's. Notwithstanding myths of line voltage increases, low line operation was already an issue in the fifties. There are two causes for low line (other than low distribution voltage): brownouts and wiring distribution losses in the building. I've seen places where test equipment was only getting 85 volts---and, of course, it didn't operate properly.

So far as I know, general thinking on 6.3 volt receiving tubes has always been "run them on 6.3 volts." I do recall hearing about some attempts to run 6SN7's on reduced heater voltage in early digital computers, but there were so many other problems with tubes run in these circuits that I don't think that lowering heater voltage helped things.

Power tubes with large tungsten or thoriated tungsten filaments are something different. For one thing, they run at a much higher temperature than oxide-coated (Wehnelt) cathodes. Even on oxide cathode tubes, the resistance of the heater is down by a factor of about 10 at room temperature (something to consider if you are trying to rig up a DC supply with a silicon bridge). All of the large (5 and

10KW type) power tubes I've worked with were set up with some sort of step-start setup. I do have some recollection of a push-pull 4CX5000 amplifier that used time delay relays to connected the heater transformer primary in star connection for a period, then to transition to delta connection. I've seen other equipment that had a filament voltage "Variac" [TM General Radio] placarded to indicate that the filaments should be brought up slowly----and provided with tick marks to show where to stop. As I recall, the recommended settings for filament voltage for thoriated tungsten and plain tungsten filaments were the minimum voltage where the filament gave enough emission for full output-----a value that increased as the tubes aged.

Tubes of the early twenties (01A, V99, etc.) used thoriated tungsten and filament voltage control as a volume control, and the old texts give methodologies for "revitalizing" tubes with low emission. These involved "flashing" the filament for a few minutes at much higher than nominal filament voltage, and some hours of "cooking" without plate current at near nominal voltage. This is tied to peculiarities of thoriated tungsten, which can experience "majority carrier" depletion (to use a transistor term) in normal use, but come back to life if "cooked" for a while. By 1930, oxide coating was standard on small tubes, both heater-cathode type (24, 27) and directly heated types (80, 45, 47).

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Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
=====

From boatanchors@theporch.com Sat Dec 14 14:37:47 1996
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Tube life
Message-ID: <32B25D18.18E6@millcomm.com>

Henry van Cleef wrote:

..a very informative post on tube filament operating conditions...

Thanks Hank!

Richard

--

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I just like to make things" So... -
+ please call Ah-ha! directly for CNC info -
+ <http://www.gdic.com/ahha> email: ahha@gdic.com -

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: don merz <71333.144@CompuServe.COM>
Subject: TV-2, Radio-Craft, Misc. FS
Message-ID: <961215020653_71333.144_DHB40-3@CompuServe.COM>

For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

Swan TV-2 2-meter transverter that matches the Swan 250/350/400/500 (or C) line. On the HF rigs, this uses 20, 15 or 10 meters as the IF but full coverage of 2 meters is only achieved on 10 meters. On the Swan 250, the full 2 meter band maps nicely into the 6 meter coverage of the 250 (or C). This TV-2 is crystallized for a 6-meter IF so it is set up to work with the 250 (or 250C). You would have to get other crystals made if you wanted to use any other band for the IF. Input: 240 watts SSB, 180 watts CW and 75 watts AM from a 5894B final. This unit has 2 small scratches on the front. But it is overall in excellent looking and working condition. All original. With original manual. \$160

Radio Craft Magazine

These are in excellent condition with covers though the original owner sometimes made notes to himself on the cover.

1933: 1,2,3,4,5,6,7,8,9,10,11: \$4 each

1934: Complete: \$48 or \$4 each

CQ Magazine

1948: 10: \$2

1965: 4,5,7,: \$1 each

TM 11-856A, Radio Receiver R390A/URR original manual. Dated January, 1956. Excellent. \$30

TM 11-5820-358-34P Radio Receiver R390A/URR Repair Parts and Special Tools Lists, February, 1972 original manual. Contains dozens of detailed photos with parts identification charts. Near-mint. \$25

TM 11-5820-358-20 Radio Receiver R390A/URR Organizational Maintenance Manual February, 1961. Original manual. Includes original TM 11-5820-358-20C2 Changes-In Force dated August, 1963. Near-mint. \$20

FREE STUFF

QST 11/40, no covers

Teletype Wiring Diagram Package sets for models 28, 33, 35. Mostly 11x17" with Teletype covers. Nice reference.

CONTACT: Don Merz, 47 Hazel Drive, Pittsburgh, PA 15228
412-234-8819 (weekdays, EST)
Internet: 71333.144@compuserve.com

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996
From: john <johnmb@pop.mindspring.com>
Subject: TV10-D/U?
Message-ID: <199612150009.AAA142794@mule0.mindspring.com>

I've been using a TV10 D/U tubetester, and was wondering how it compares to the more popular TV 7 seen mentioned here often. Mine is a Fair Radio unit that I purchased from another party early this year... Nice to be able to look at 811's and the like!

Best 73
/John

John Brewer AMI #24
WB50AU/4 Clayton NC
Always looking for Lysco, and other
lesser known commercial ham gear
from the 30s-60s.

From boatanchors@theporch.com Sat Dec 14 01:58:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: USM-3A tool kit/test set
Message-ID: <199612140331.WAA12802@northshore.shore.net>

Dick:

FYI, the decade capacitor number is TS-671/U and the decade resistor is TS-672/U. Hope you are able to find one. I'd be very curious to know what other list readers own one of these little gems. I have a certain fondness for miniature boatanchors and their associated test/service sets and this certainly qualifies.

I was told that they were part of the radio compliment on submarines and other small boats. Anyone know more about these Navy test sets?

73, Michael Crestohl, W1RC, mc@shore.net Cambridge Vermont 05444-0024

From boatanchors@theporch.com Sat Dec 14 20:55:58 1996

From: "Allan Fritsche" <fritsche@msn.com>

Subject: WECO tube - Unknown

Message-ID: <UPMAIL03.199612150016550031@msn.com>

Hi Gang, That tube that was descibed lately, i.e. 377? was used for a switching matrix for ANI(Automatic Number Identification) in the central offices. Can't remember the J number of the bay, but who cares, right.

Your Friend Al
fritsche@msn.com